## **REMARKS**

The proposed claim amendments set forth in Applicants' response submitted July 11, 2007, which were not entered (see Advisory Action dated July 27, 2007) are <u>not</u> repeated herein.

New claim 23 has been added. This new claim is similar to claim 1 except that it does not encompass polyethylene glycols having a number of ethylene oxide units greater than or equal to 800. Support for this new claim exists throughout the present specification, including the original claims.

Claims 1-9, 11-21 and 23 are currently pending.

The Office Action rejected claim 1 under 35 U.S.C. § 112, first paragraph, asserting that the limitation in subpart (a) requiring the polyethylene glycol to have a number of ethylene oxide units greater than or equal to 800 does not satisfy the written description requirement. In view of the following comments, Applicants respectfully request reconsideration and withdrawal of this rejection.

As indicated by the pages from the CTFA cosmetics handbook submitted as Tab A of Applicants' previous response (a copy of which is re-submitted here as Tab A), PEG-800 is recognized in the cosmetics industry as being a viscosity increasing agent. Significantly, PEG compounds having fewer ethylene oxide units such as, PEG-500, PEG-400, etc., are not identified by the CTFA handbook as being viscosity increasing agents. Rather, they are recognized in the industry as being "solvents." (See, Tab A). Thus, one skilled in the cosmetics art, based on information available to him or her such as the information reflected in the CTFA handbook, would believe that PEG compounds do not function as viscosity

increasing agents unless the compounds have at least 800 ethylene oxide units. That is, the extrinsic evidence as demonstrated by Tab A indicates that PEG compounds do not inherently function as thickening agents unless they have at least 800 ethylene oxide units. Given that the present application relates to using PEG compounds as thickening agents and given that the PEG compounds do not have such thickening activity unless they have at least 800 ethylene oxide units, it follows that the present application necessarily discloses the use of PEG-800 as a thickening agent. Under such circumstances, the present application adequately supports claims directed to using PEG-800 as a thickening agent. (See also, In re Wertheim).

In view of the above, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

The Office Action rejected the pending claims under 35 U.S.C. § 103 as obvious over U.S. patent 6,277,797 ("Glenn"). In view of the following comments, Applicants respectfully request reconsideration and withdrawal of this rejection.

Glenn discloses the presence of humectants in his <u>liquid</u> compositions. Such humectants include low molecular weight PEG compounds and glycerol. As discussed above, the CTFA handbook reflects that such low molecular weight PEG compounds do not have any effect on viscosity, but rather are used as "solvents." One skilled in the art, following <u>Glenn</u>, would not have been motivated to add a PEG compound in a viscosity increasing amount to yield the claimed compositions.

Glenn neither teaches nor suggests the claimed alkoxylated thickening agents. Rather, Glenn discloses, at col. 3, lines 5-27, polyols having at most 200 alkoxylated groups (n =

200). Glenn's polyols are used as "humectants and solutes." (See, col. 3, line 1). Nowhere does Glenn teach or suggest using his polyols to thicken his compositions.

In this regard, Applicants again note that Tab A indicates that PEG compounds having 200 ethoxylation units or less are "solvents," not thickening agents. Thus, Glenn's disclosure of PEG compounds up to PEG-200 (n = 200) cannot teach or suggest the claimed thickening agents. Rather, the disclosure relates to solvents for Glenn's liquid compositions.

For at least this reason, <u>Glenn</u> neither teaches nor suggests the claimed invention.

This is particularly true for new claim 23 which excludes the presence of such alkoxylated PEG compounds.

Furthermore, the invention compositions require the presence of (1) at least one foaming surfactant, (2) at least 1 % by weight of at least one hydrophilic silica, <u>and</u> (3) at least one oxyalkylenated compound, wherein the oxyalkylenated compound is a thickening agent present in a composition thickening effective amount. As demonstrated in comparative examples 1-3 set forth on pages 24 and 25 of the present specification, if one of these required ingredients is missing, the resulting composition is unacceptable. In stark contrast, invention example 1 set forth on pages 24 and 25 demonstrates that compositions containing all three of the required ingredients possess superior, more desirable properties. These examples demonstrate the criticality of having all three of the required ingredients present in the same composition.

For such compositions to be obvious under 35 U.S.C. §103, <u>Glenn</u> must motivate or suggest to one skilled in the art to combine all three required ingredients into a single composition. <u>Glenn</u>, however, does not provide the necessary suggestion or motivation. In

particular, <u>Glenn</u> does not teach or suggest adding <u>a thickening effective amount</u> of at least one oxyalkylenated compound <u>thickening agent</u> to his compositions. Accordingly, <u>Glenn</u> does not teach or suggest the invention compositions or methods.

First, Glenn does not disclose or suggest adding a thickening effective amount of an oxyalkylenated compound to his compositions. For Glenn to disclose a thickening effective amount of the required oxyalkylenated compound, it would have to disclose or suggest actually thickening compositions with an oxyalkylenated compound. See, Abbott Laboratories v. Baxter Pharmaceutical Products, Inc., 67 U.S.P.Q.2d 1191 (Fed. Cir. 2003)("effective amounts" are not necessarily disclosed by prior art compositions containing the claimed active ingredient; the desired effect must be achieved). Merely because Glenn suggests that oxyalkylenated compounds can be added as humectants, solutes and surfactants does not mean that it discloses or suggests thickening compositions with such compounds. See, Abbott Laboratories. Based on Glenn's disclosure related to the limited purposes for which oxyalkylenated compounds could be added to his compositions, no motivation would exist for one skilled in the art to actually thicken Glenn's compositions using a thickening effective amount of an oxyalkylenated compound. Rather, one skilled in the art would add oxyalkylenated compounds in humectant, solute and/or surfactant effective amounts. Thus, Glenn neither teaches nor suggests the required element that the oxyalkylenated compound be present in a thickening effective amount.

Second, <u>Glenn</u> does not disclose or suggest adding the required oxyalkylenated thickening agents to his compositions. As noted above, <u>Glenn</u>'s polyols are not thickening

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agents. Rather, <u>Glenn</u> discloses oxyalkenylated compounds suitable for use in his compositions as humectants, solutes and surfactants.

The significance of the requirement that the required oxyalkylenated compounds be thickening agents is demonstrated by the examples in the present specification. Comparative example 2 (pages 24-25) does not contain PEG-120 methylgluclose dioleate, an oxyalkylenated thickening agent, but it does contain two of Glenn's acceptable solutes/humectants, sorbitol and glycerol. (See, Glenn at col. 13, lines 14-15). This composition is a "translucent liquid product like water." Thus, compositions containing only Glenn's solutes/humectants result in unacceptable products. However, when thickening agent PEG-120 methylgluclose dioleate is added, the resulting composition is a "thick translucent gel." (Example 1, pages 24-25). Thus, adding the claimed oxyalkylenated compound in a composition thickening effective amount results in a product having superior, more desirable properties, whereas adding Glenn's solutes/humectants does not. For this reason as well the §103 rejection is improper.

In view of the above, Applicants respectfully submit that the rejection under 35 U.S.C. § 103 is improper and should be withdrawn.

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Applicants believe that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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## International Cosmetic Ingredient Dictionary and Handbook

Eighth Edition 2000

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H(OCH,CH,),OH

where n has an average value of 240.

Information Sources: 21CFR172.770, 21CFR175.300, 21CFR178.3910, JCIC, JCLS,

MI-12(7729)

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names: Polyethylene Glycol (240) Polyethylene Glycol 11000 Polyoxyethylene (240)

**Trade Names:** 

Lipoxol 12000 (Condea Chemie) Polyglykol 12000 (Clariant GmbH)

**PEG-350** 

CAS No.: 25322-68-3 (generic)

**Definition:** PEG-350 is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 350.

Information Sources: 21 CFR172.770, 21 CFR173.310, 21 CFR175.300, 21 CFR178.3910, JCLS, JSCI, MI-12(7729), TSCA

Chemical Classes: Alkoxylated Alcohols;

**Polymeric Ethers** 

Functions: Binder; Emulsion Stabilizer;

Solvent

Technical/Other Names: Polyethylene Glycol 20000 Polyoxyethylene (350)

Trade Names:

Lipoxol 20000 (Condea Chemie) Polyglykol 20000 (Clariant GmbH) Upiwax 20000 (Universal Preserv-A-Chem)

**PEG-400** 

**Definition:** PEG-400 is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 400.

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Binder; Emulsion Stabilizer;

Solvent

Technical/Other Names:

Polyethylene Glycol (400) Polyoxyethylene (400)

**PEG-500** 

**Definition:** PEG-500 is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 500.

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Binder; Emulsion Stabilizer;

Solvent

Technical/Other Names:

Polyethylene Glycol (500) Polyoxyethylene (500)

Trade Name:

Toho PEG#20000 (Toho)

PEG-800

**Definition:** PEG-800 is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 800.

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Anticaking Agent; Binder;

Humectant; Plasticizer; Viscosity Increasing

Agent - Aqueous

Technical/Other Names:

Polyethylene Glycol (800)

Polyoxyethylene (800)

Trade Names:

Polyglykol 35000 (Clariant GmbH) Polyglykol 35000 S (Clariant GmbH)

PEG-2M

CAS No.: 25322-68-3 (generic)

**Definition:** PEG-2M is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 2000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300,

21CFR178.3910, JSQI, MI-12(7729), NF XVIII,

TSCA, USAN

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:

PEG-2000

Polyethylene Glycol (2000) Polyoxyethylene (2000)

Trade Name:

Polyox WSR N-10 (Amerchol)

Trade Name Mixture:

Spectraveil AQ (Uniqema Solaveil)

PEG-5M

CAS No.: 25322-68-3 (generic)

Definition: PEG-5M is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 5000.

Information Sources: 21CFR172.770,

21CFR173.310, 21CFR175.300,

21CFR178.3910, JSQI, MI-12(7729), NF XVIII,

TSCA, USAN

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Reported Product Category: Shampoos

(Non-coloring)

Technical/Other Names:

PEG-5000

Polyethylene Glycol (5000)

Polyoxyethylene (5000)

Trade Names:

Polyox WSR N-80 (Amerchol)

RITA PEO-1 (RITA)

PEG-7M

CAS No.: 25322-68-3 (generic)

Definition: PEG-7M is the polymer of ethylene oxide that conforms generally to the formula:

H(OCH,CH,),OH

where n has an average value of 7000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300,

21CFR178.3910, JSQI, MI-12(7729), NF XVIII,

TSCA, USAN

Chemical Classes: Alkoxylated Alcohols;

Polymeric Ethers

The inclusion of any compound in the Dictionary and Handbook does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.